

We claim:

1. A process for synthesizing the compound 1,5-Dinosyl-3,3,7,7-tetrakis(difluoramino) octahydro-1,5-diazocine (DNTDFD), comprising the following steps:

5        reacting tetrahydro-1,5-bis(4-nitrobenzenesulfonyl)-1,5-diazocine-3,7-(2H, 6H) dione with HNF<sub>2</sub>/oleum, in the presence of a diluent and absorbent for the reagent difluoramine, initially approximately between -5 and 0 degrees C;

         allowing the temperature to rise to between 10 degrees C and ambient temperature during said reaction, to yield crude DNTDFD.

10        2. The process of claim 1 wherein the step of reacting tetrahydro-1,5-bis(4-nitrobenzenesulfonyl)-1,5-diazocine-3,7-(2H, 6H) dione with HNF<sub>2</sub>/oleum further comprises stirring.

15        3. The process of claim 1 wherein the said diluent and absorbent is a 2:1 mixture of FREON ® 11 with pentane or cyclopentane.

         4. The process of claim 1 wherein the said diluent and absorbent is a 2:1 mixture of pentane or cyclopentane with FREON® 11.

20        5. The process of claim 1 wherein the said diluent and absorbent is pentane or cyclopentane.

6. The process of claim 1 comprising the additional step of cooling the -1,5-bis(4-nitrobenzenesulfonyl)-1,5-diazocine-3,7-(2H, 6H) dione, the HNF2/oleum and the diluent and absorbent, to a temperature between approximately -5 and 0 degrees C before allowing the temperature to rise.

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7. The process of claim 1 wherein the step of reacting tetrahydro-1,5-bis(4-nitrobenzenesulfonyl)-1,5-diazocine-3,7-(2H, 6H) dione with HNF2/oleum, in the presence of a diluent and absorbent for the reagent difluoramine, comprises combining said HNF2/oleum and said diluent and absorbent for a time of approximately one hour before adding the tetrahydro-1,5

10 bis(4-nitrobenzenesulfonyl)-1,5-diazocine-3,7-(2H,6H) dione.

8. The process of claim 1, further comprising the steps of cooling said crude DNTDFD solution, adding it to crushed ice, filtering, adding a triturating solution, filtering and drying.

15 9. The process of claim 8, wherein the triturating solution is aqueous sodium hydrogen carbonate.

10. A process for synthesizing the compound 1,5-Dinosyl-3,3,7,7-tetrakis(difluoramino) octahydro-1,5-diazocine (DNTDFD), comprising the following steps:

20 reacting tetrahydro-1,5-bis(4-nitrobenzenesulfonyl)-1,5-diazocine-3,7-(2H, 6H) dione with HNF2/oleum initially approximately between -5 and 0 degrees C, and allowing the temperature to rise to between 10 degrees C and ambient temperature during said reaction to yield crude DNTDFD.

11. The process of claim 10 wherein the step of reacting tetrahydro-1,5-bis(4-nitrobenzenesulfonyl)-1,5-diazocine-3,7-(2H, 6H) dione with HNF2/oleum further comprises stirring.

12. The process of claim 11 further comprising the step of adding a diluent and absorbent comprising pentane, FREON® 11, or pentane and FREON® 11.

13. The process of claim 12, further comprising the step of cooling the tetrahydro-1,5-bis(4-nitrobenzenesulfonyl)-1,5-diazocine-3,7-(2H, 6H) dione with HNF2/oleum to a temperature between approximately -5 and 0 degrees C, before allowing the temperature to rise.

14. A process for synthesizing the compound 1,5-Dinosyl-3,3,7,7-tetrakis(difluoramino) octahydro-1,5-diazocine (DNTDFD), comprising the following steps:

reacting tetrahydro-1,5-Dinosyl-perhydrodiazocine-3,7-dione with HNF2/oleum, in the presence of a diluent and absorbent for the reagent difluoramine, initially approximately between -5 and 0 degrees C;

allowing the temperature to rise to between 10 degrees C and 15 degrees C during said reaction, to yield crude DNTDFD.

15. The process of claim 14 further comprising the step of adding a diluent and absorbent comprising pentane, FREON® 11, or pentane and FREON® 11.